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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,049	09/30/2003	Ioannis Dotsikas	MUH-12818	5871
24131	7590	06/20/2005	EXAMINER	
LERNER AND GREENBERG, PA			BERRY, RENEE R	
P O BOX 2480			ART UNIT	PAPER NUMBER
HOLLYWOOD, FL 33022-2480			2818	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/675,049	DOTSIKAS, IOANNIS 	
	<b>Examiner</b>	<b>Art Unit</b>	
	Renee R. Berry	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 06 January 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 13-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 13-17 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 11 December 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US Patent No. 5,484,484 to Yamaga et al.

In regards to claim 13, Yamaga teaches a furnace for vapor phase depositing components contained in a process gas onto a plurality of semiconductor substrates, the furnace comprising: a process space for receiving the semiconductor substrate; a first feed/discharge line connected to said process space (Fig. 1, ref. # 4); a second feed/discharge line (Fig. 1, ref. # 6); a first feed/discharge line (Fig. 1, ref. # 5); second feed/discharge line (Fig. 1, ref. # 7); a device for producing a process gas flow, said device for producing said process gas flow connected to said first feed/discharge line and/or said second feed/discharge line causing the process gas to flow laterally past the stack defining a main flow direction (Fig. 1, ref. # W; vertical); a heating device (Fig. 1, ref. # 22); and a regulating unit for regulating a magnitude (Fig. 1, ref. # 20).

In regards to claim 14, Yamanga teaches the furnace according to claim wherein said first feed/discharge line and/or said second feed/discharge line are configured at opposite sides of said process space (Fig. 1, ref. #s 4 and 6).

In regards to claim 15, Yamanga teaches the furnace according to claim wherein said regulating unit is configured for changing a main flow direction of said process gas flow at intervals in accordance with a variable time pattern at column 5, lines 55-61 and column 6, lines 16-27.

In regards to claim 16, Yamanga teaches the furnace according to claim 13, further comprising: a measuring unit for detecting a quantity and/or a distribution of the components deposited onto the semiconductor substrate at column 5, lines 23-31.

In regards to claim 17, Yamanga teaches the furnace according to claim 16, further comprising: a control unit connected to said measuring unit, said control unit for an online control of said device for producing a process gas flow at column 5, lines 23-31.

***Response to Amendment***

Applicant argues that the reference does not teach a plurality of substrates in the furnace disposed one above another at a short distance to form a stack; nor does the reference teach defining a main flow direction which changes by 180 degrees.

Yamanga teaches a plurality of platforms for supporting a plurality of substrates within a chamber; and the substrate can be rotated to 180 degrees during the deposition process at Fig. 1, ref. W

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee R Berry whose telephone number is (571) 272-1774. The examiner can normally be reached on M-F 9-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*RRB*  
RRB

June 10, 2005

*David Nelms*  
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Supervisory Patent Examiner  
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